AIR CONDITIONING SYSTEM

ABSTRACT OF THE DISCLOSURE

5 [0037] The air conditioning system for conditioning of an airflow stream uses a fluid flow system to control operational modes of heating, cooling, dehumidifying, freeze protection and defrost. The fluid flow system allows an air conditioning system to operate using a hot fluid source without the need for a gas or oil direct heat air stream heat system. The fluid flow system circulates fluid through a reheat coil and a precooling coil or a bypass conduit thereof depending on the operating mode of the system. Routing of fluid flow is controlled by a hot water control valve and a bypass valve under control of a control panel and a check valve stabilizing the fluid pressure minimizing formation of gas bubbles in the fluid which condition may degrade system performance.